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THE

Surgical Instruments of the Hindus

THE
**SURGICAL INSTRUMENTS
OF THE HINDUS**

WITH

**A Comparative Study of the Surgical Instruments of
the Greek, Roman, Arab and the Modern
European Surgeons**

BY

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Life Member and Professor of Botany, Indian Association
for the Cultivation of Science, Examiner,
Calcutta University*

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PREFACE

Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied in this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSIA ROAD NORTH, } G N MUKHOPĀDHYĀYA,
Calcutta, February, 1914

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ABBREVIATIONS

Adams :	The Genuine Works of Hippocrates Translated by Francis Adams, LL.D. in two volumes (Sydenham Society).
A. H.	Catalogue of Surgical Instruments and Appliances Allen and Hanburys Ltd. 1903
A. S. :	Catalogue of Surgical Instruments and Appliances. Arnold and Sons. 1895.
Anderson	See Wellcome.
B. B. :	Surgical Instruments and Appliances. Bugeoyne, Burdges & Co.
C. C. G. :	Collection de Chirurgiens Grecs. Bibliothèque Nationale. Paris
Ericksen.	The Science and Art of Surgery. By Sir John Eric Ericksen Bt., F.R.S., LL.D. Tenth Edition. 1895
Esmarch :	The Surgeon's Handbook of the Treatment of Wounded in War. By Dr. Friedrich Esmarch.
Heath :	Minor Surgery and Bandaging By C. Heath, F.R.C.S. Second Edition
I. M. G.	Indian Medical Gazette, 1904.
K. S. :	Catalogue of Surgical Instruments. Kny-Scheerer & Co.
Milne.	Surgical Instruments in Greek and Roman Times. By T. S. Milne, M.A., M.D., 1907.
Porter :	The Surgeon's Pocket-Book. The Best Treatment of Wounded in War. By Surgeon-Major T. H. Porter 1891.
Princep	Prinsep & Thomas Indian Antiquities

- Swain . Surgical Emergencies. By W. P. Swain,
F.R.C.S. Third Edition. 1880.
- Thakore Sahib . *History of Aryan Medical Science* By H. H.
Sir Bhagvat Singh Jee, K.C.I.E., M.D.,
D.C.L., LL.D., F.R.C.P.E. Thakore Sahib
of Gondal 1896.
- Waggett . *Diseases of the Nose.* By E. B. Waggett,
M.A., M.B., B.C. 1907
- Wellcome Third Report of the Wellcome Research
Laboratories at the Gordon Memorial College,
Khartoum.
- White . The Veterinary Art. By James White. 1851.
-

CORRECTIONS

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"	88	"	XIV	"	3	"	2	"	6
	103	"	LII	"	209		4	"	209
"	108	"	LIV	"	6	"	6	"	5
"	108	"	LIV	"	6	"	6	"	6
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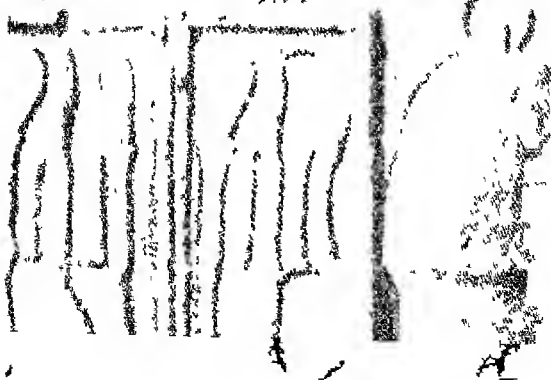
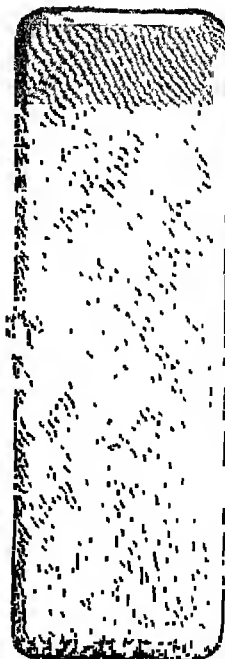
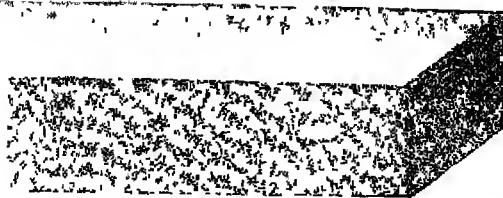
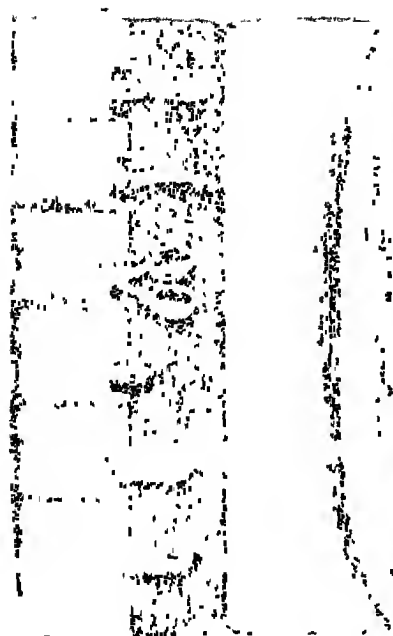


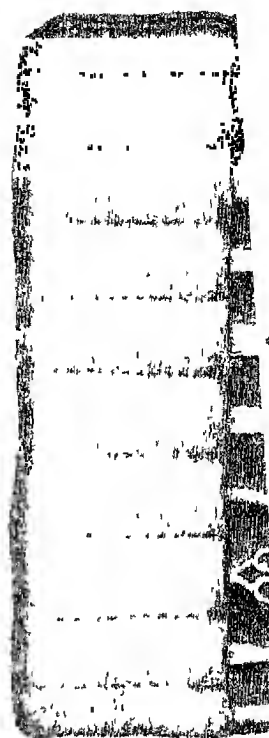
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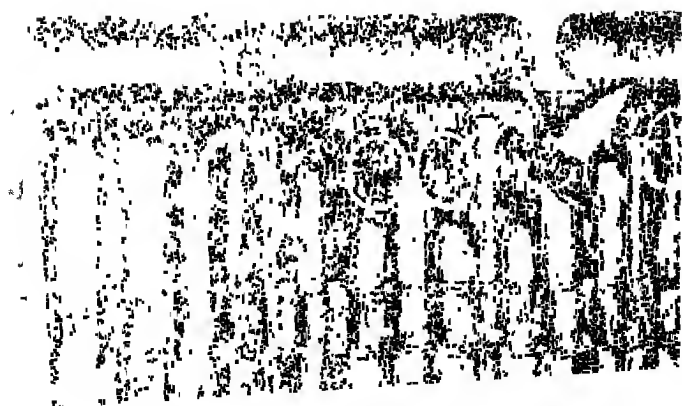
Surgical Instruments of the Hindus.



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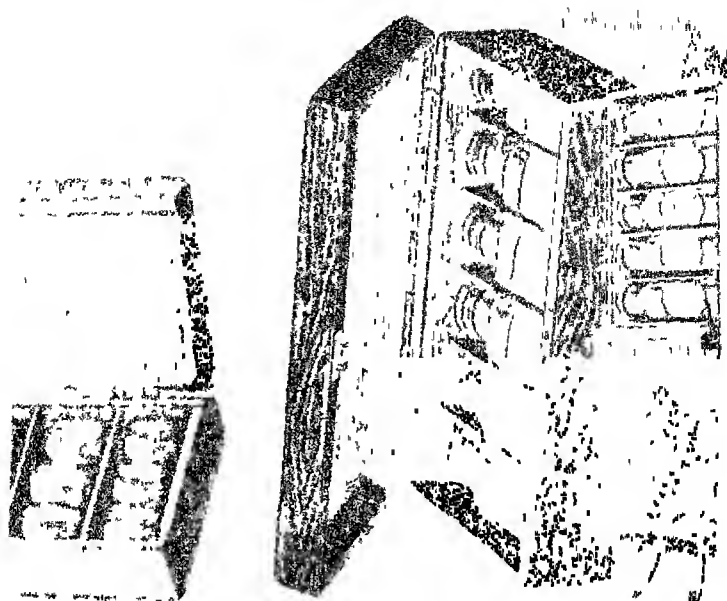


THE SURGICAL INSTRUMENTS OF THE HINDUS.

PLATE III.

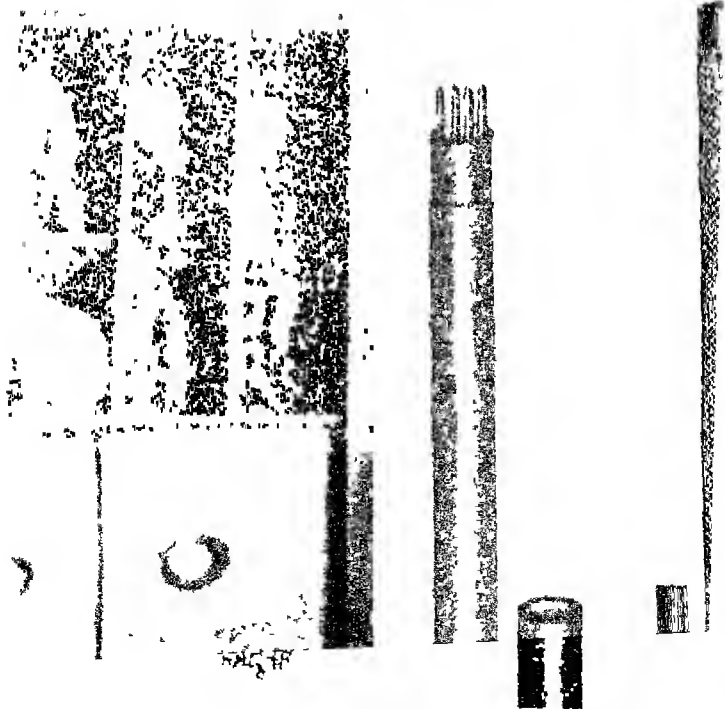
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Surgeon's instruments of the 18th century



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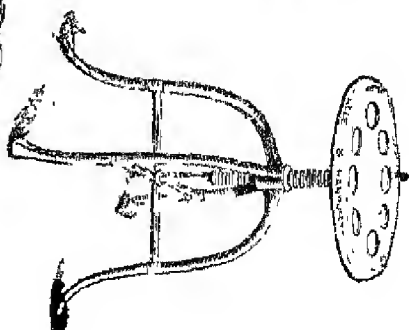
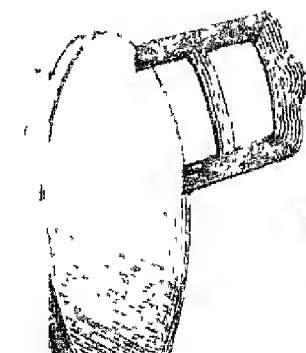
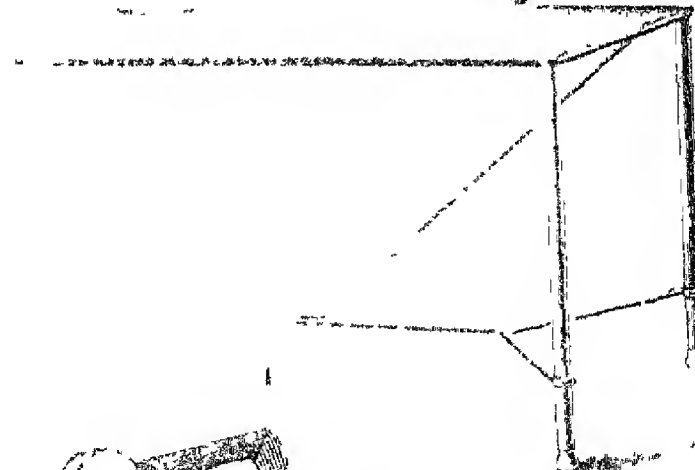
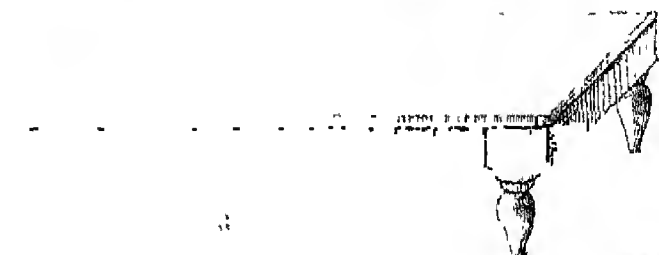
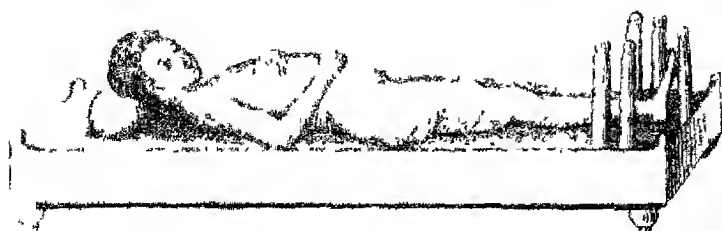


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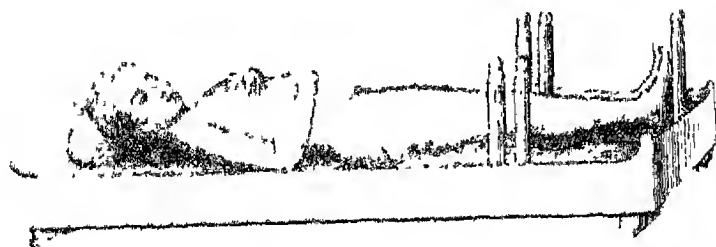
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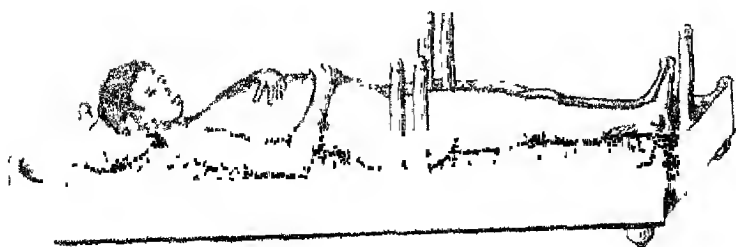
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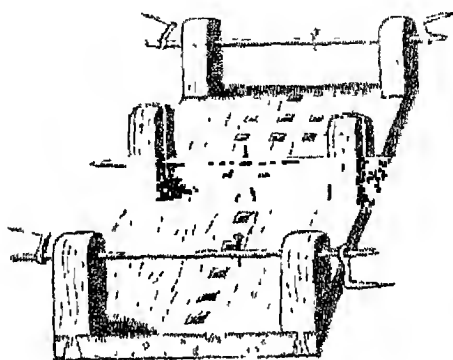
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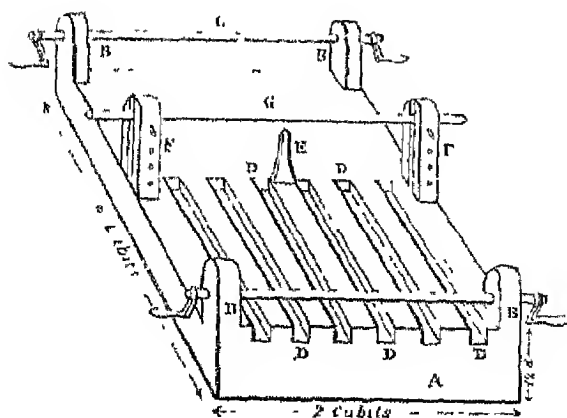
Adams, Vol. II Pl. IV Fig. 1 & 2

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Plate VII.



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PLATE VIII

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A mistake in the figure given by M. Littre is here corrected

A A lever applied to the nates of the luxated side, and acting from without inwards, in order to bring the head of the bone into its cavity

B Another lever, held by an assistant put into one of the grooves of the machine, and intended to act against lever A

C Groove in which the end of the lever A takes its point of support.

D. The luxated member.

EE Extension and counter-extension.

Adams, Vol. II Pl. V. Fig. 1

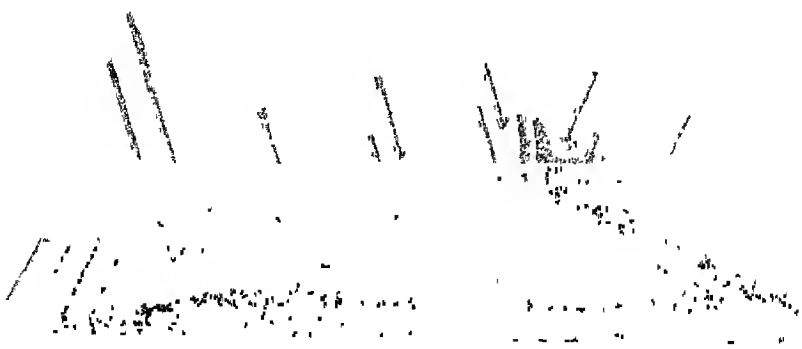
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FIGURE.

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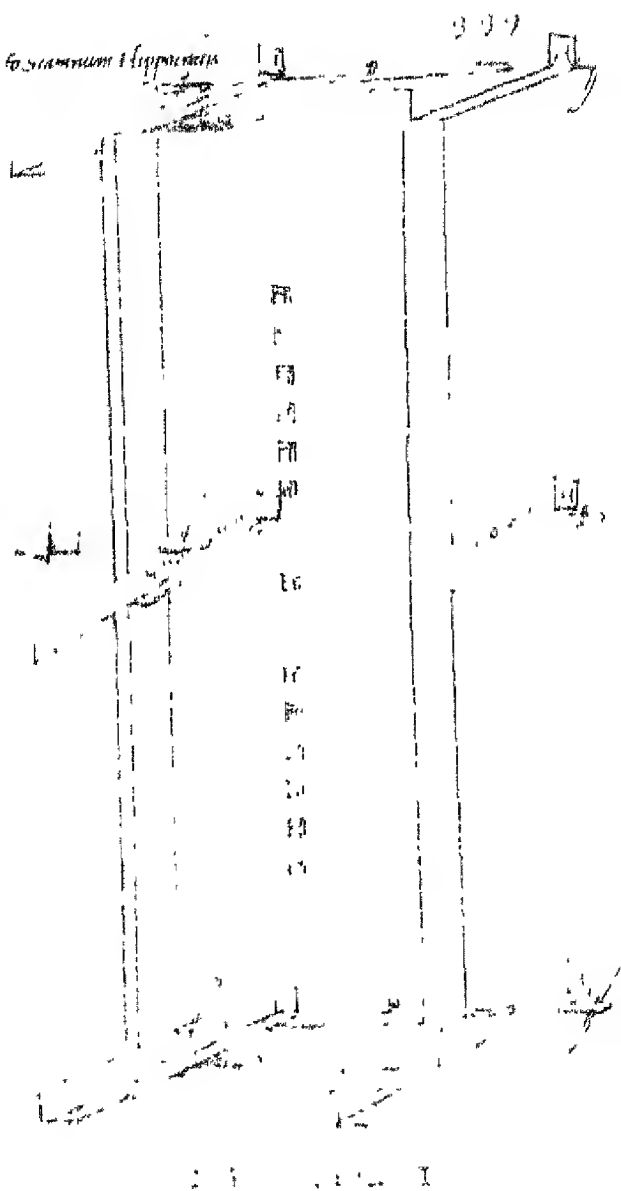


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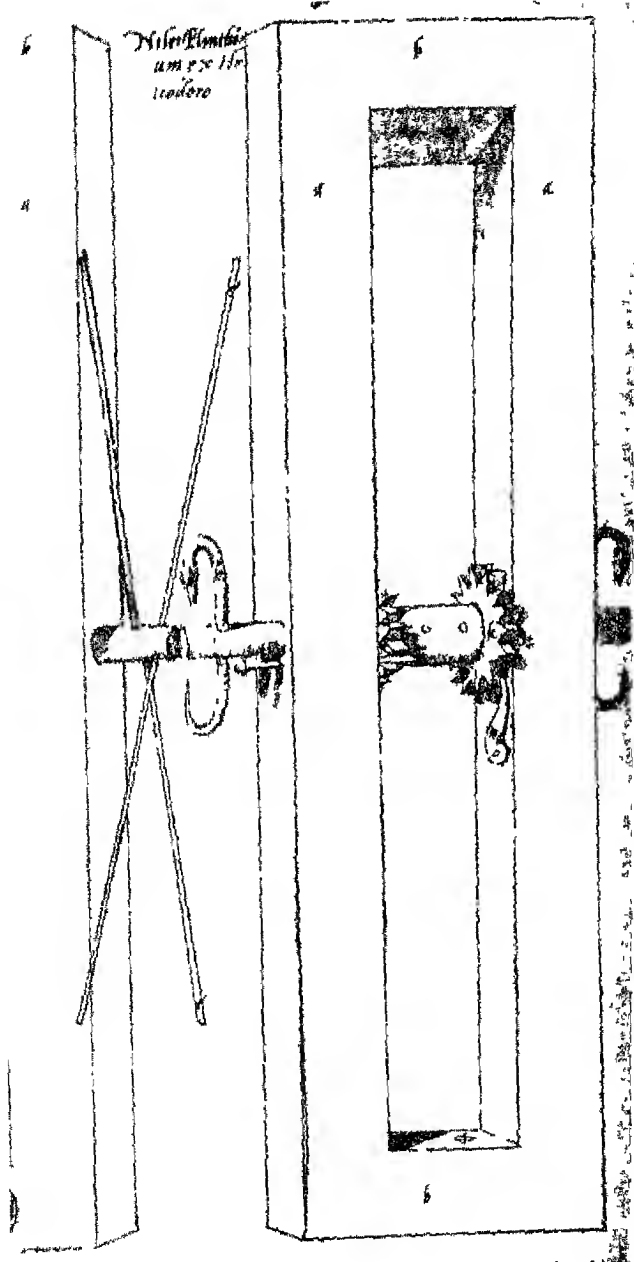


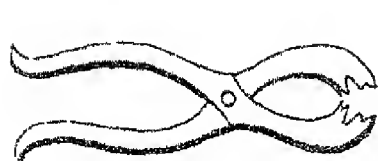
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Plate XI



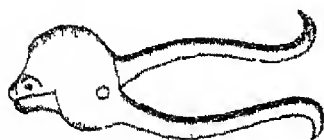
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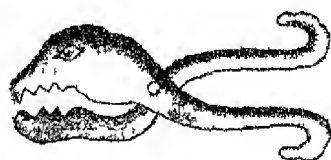
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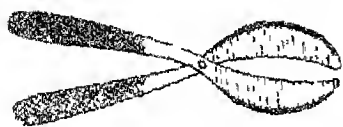
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THE SVASTIKA YANTRA OR CROCODILIAN INSTRUMENTS.

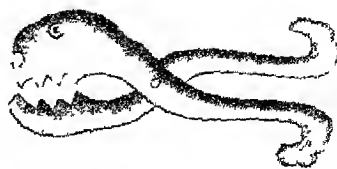
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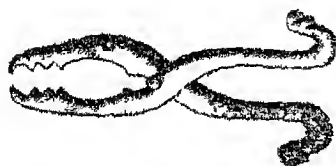
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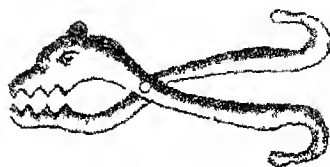
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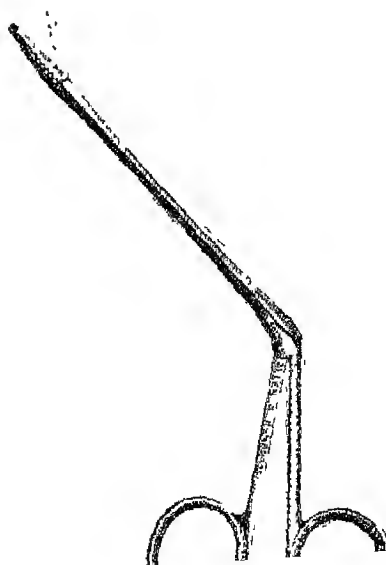


PLATE XIII.

THE SVASTIKA YANTRA OR CLUCKIFORM INSTRUMENTS

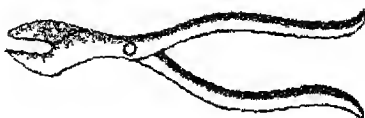
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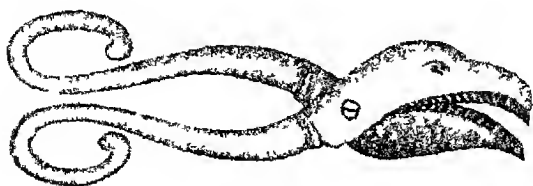
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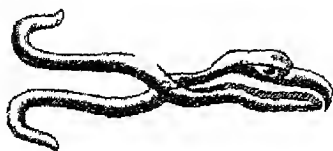
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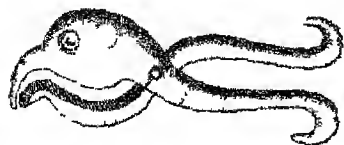
PLATE XIV.

THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS.

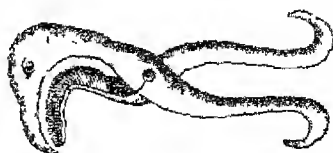
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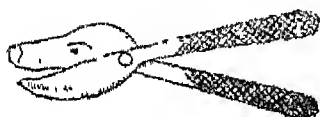
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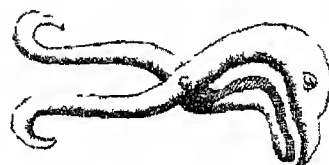
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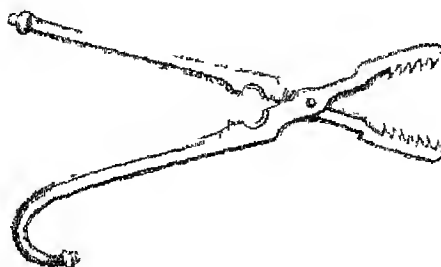
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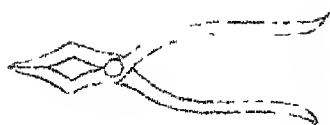
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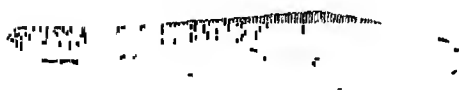
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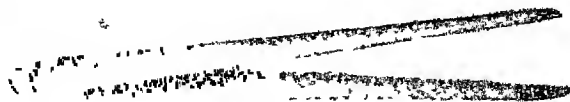
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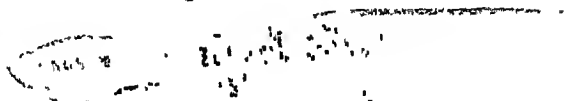
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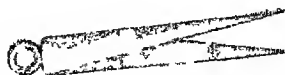
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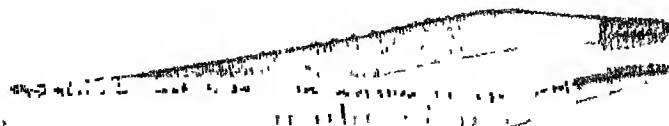
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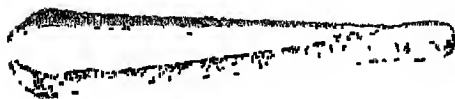
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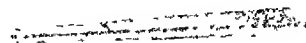
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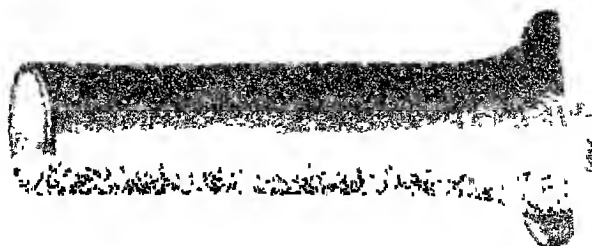
PLATE XVIII.

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS

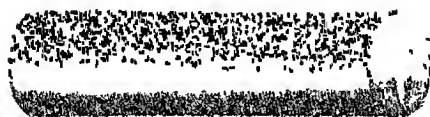
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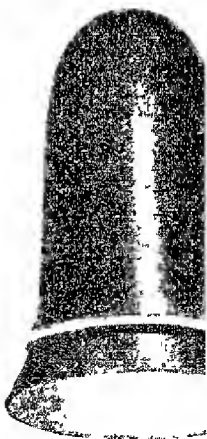
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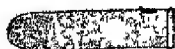
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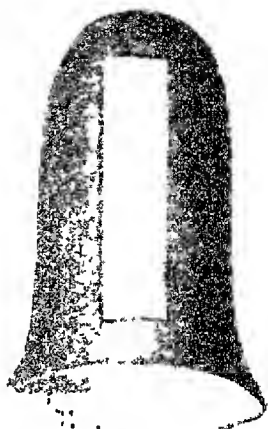
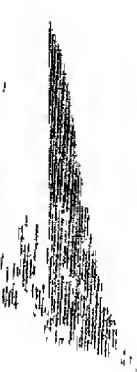
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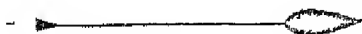
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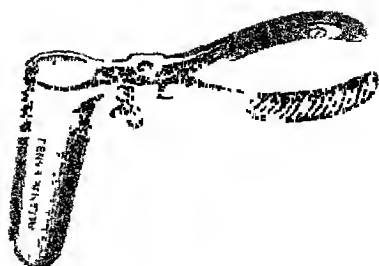
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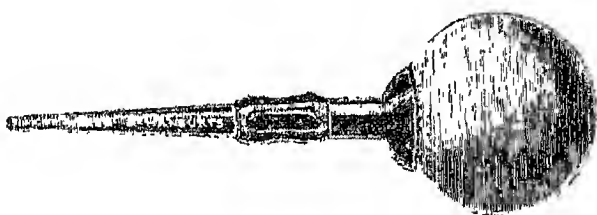
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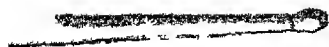
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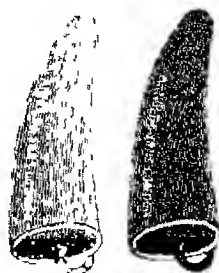
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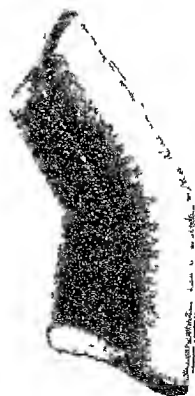
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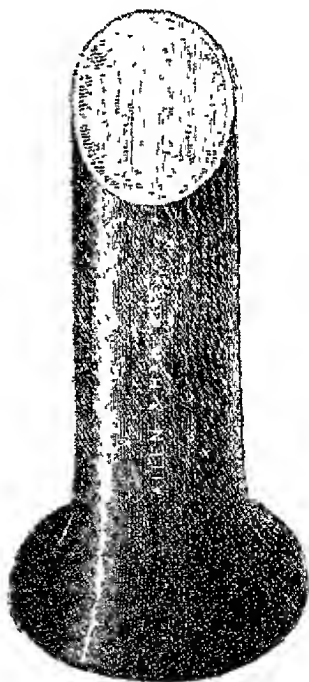
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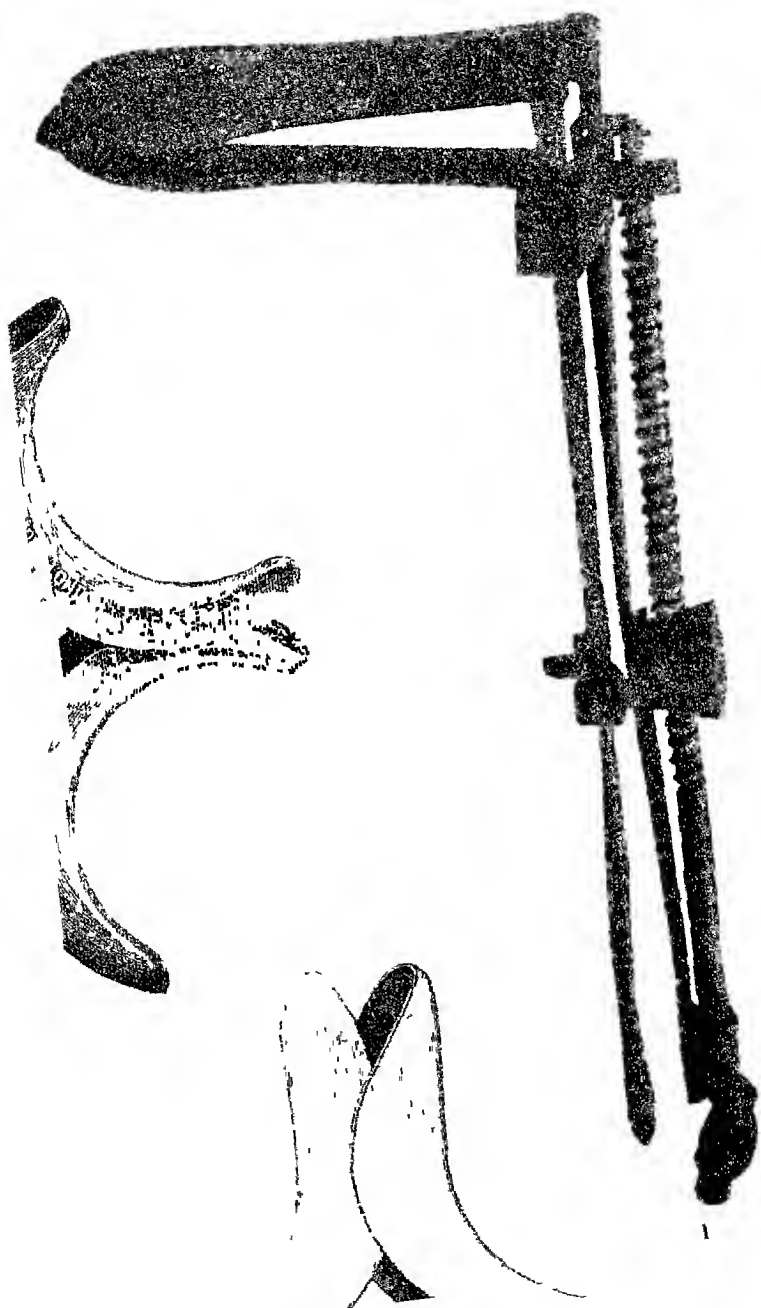
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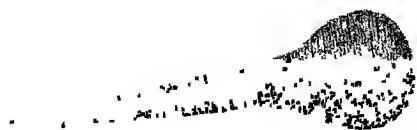
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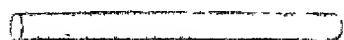
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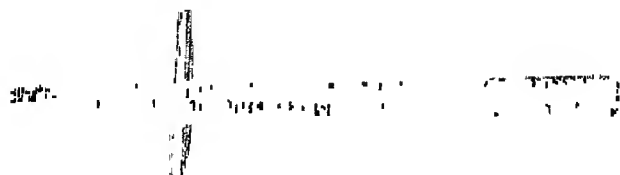
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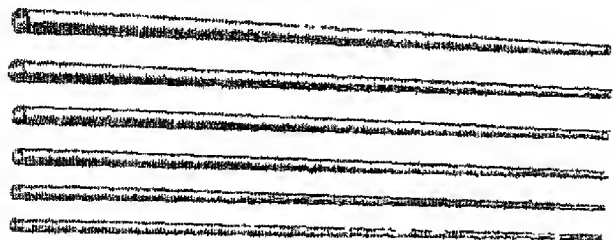
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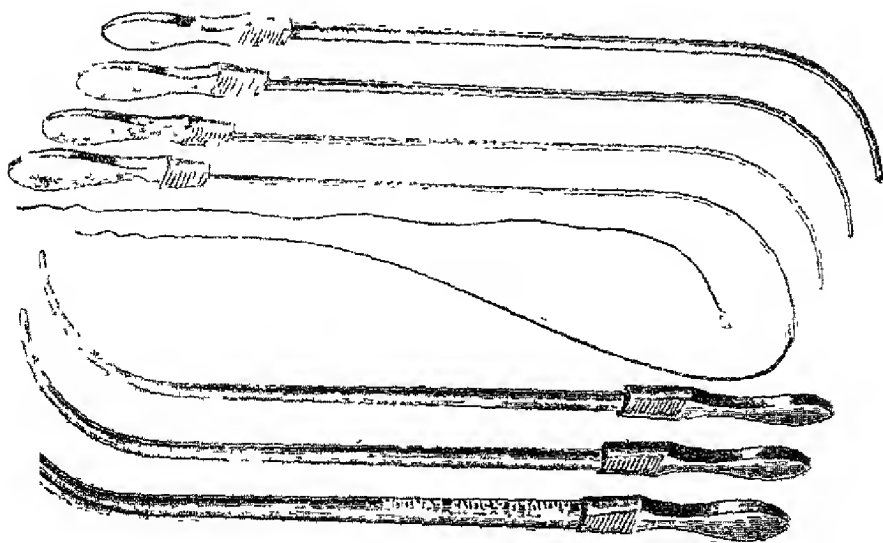
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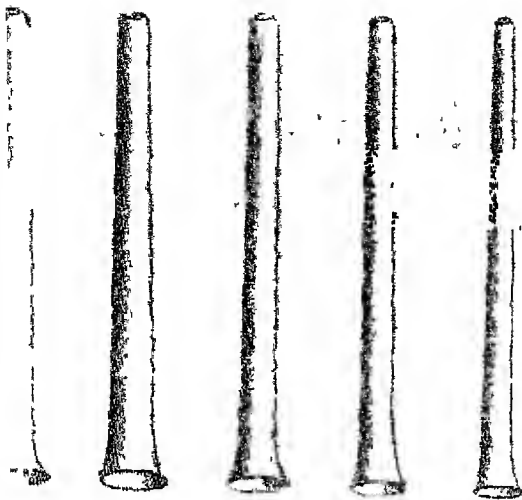
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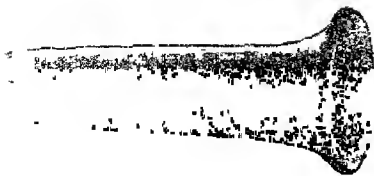
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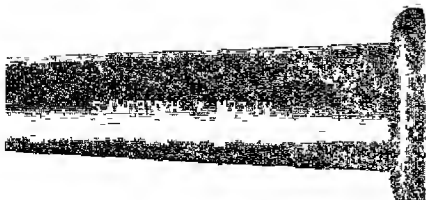
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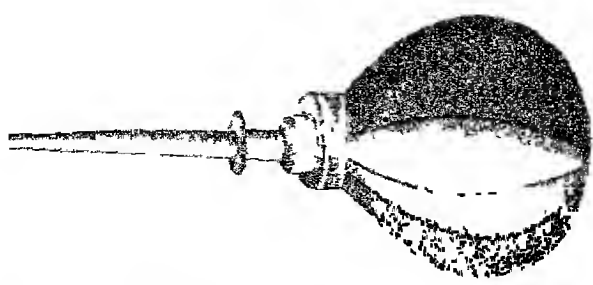
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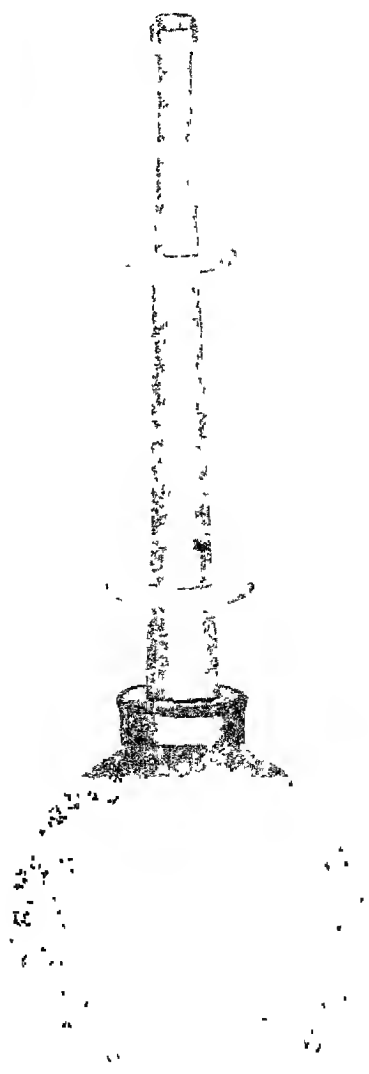


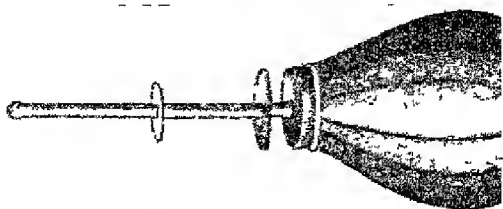
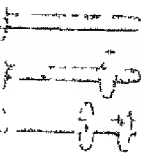
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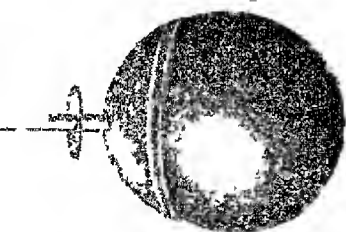
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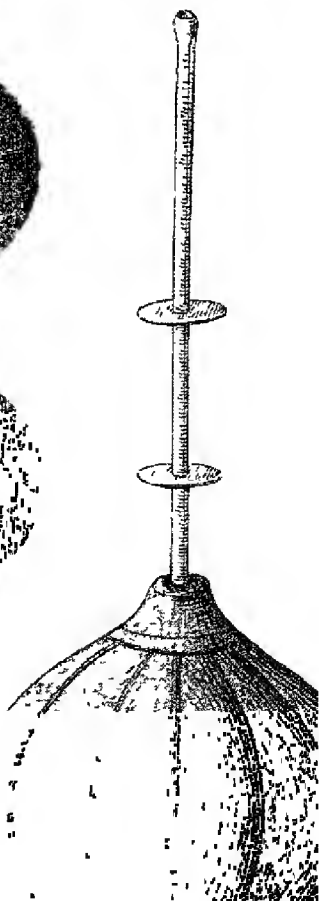
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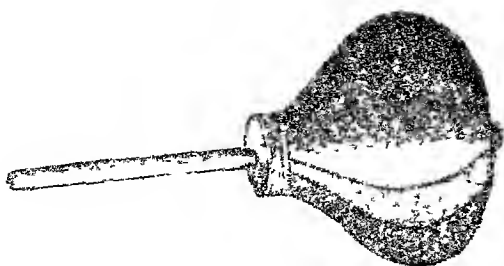
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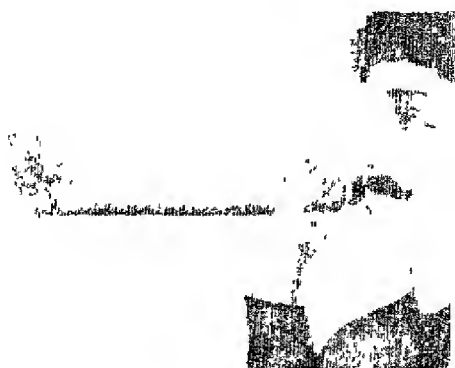
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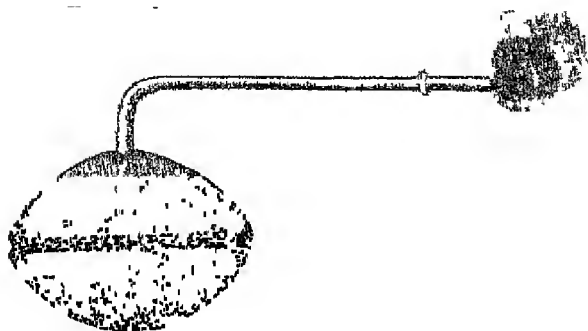
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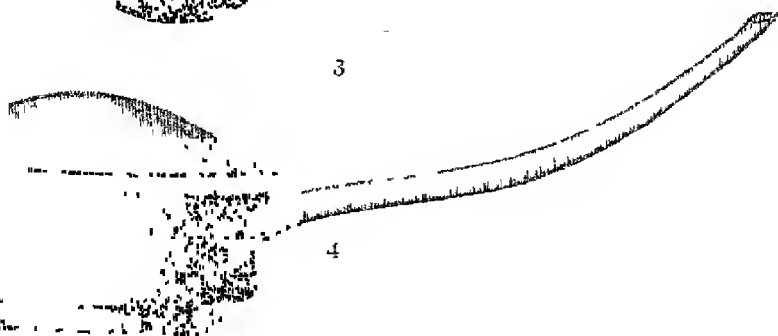
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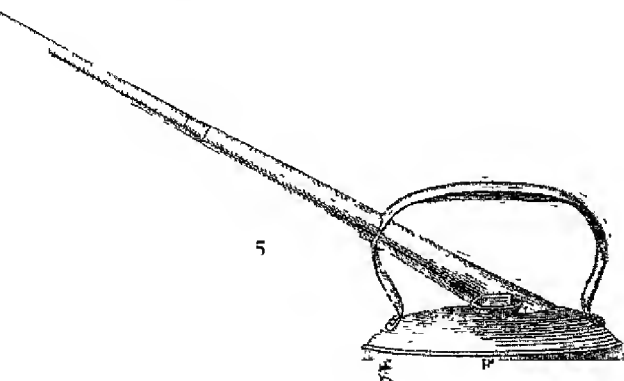
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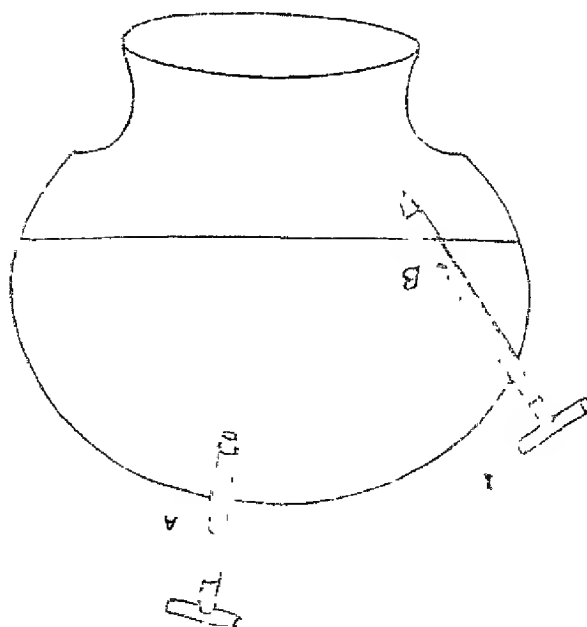
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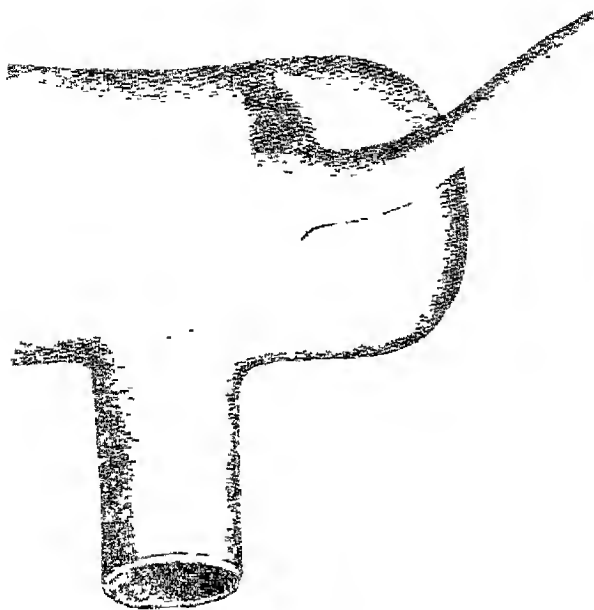
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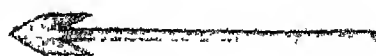
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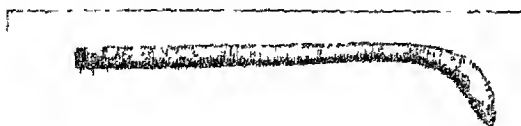
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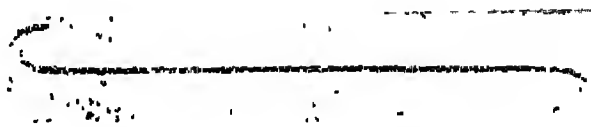
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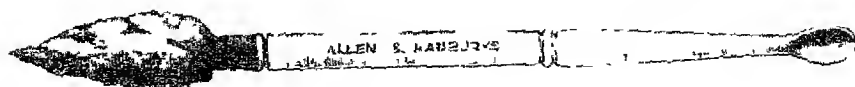
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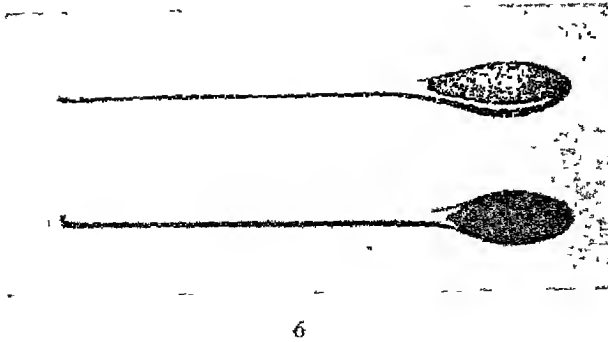
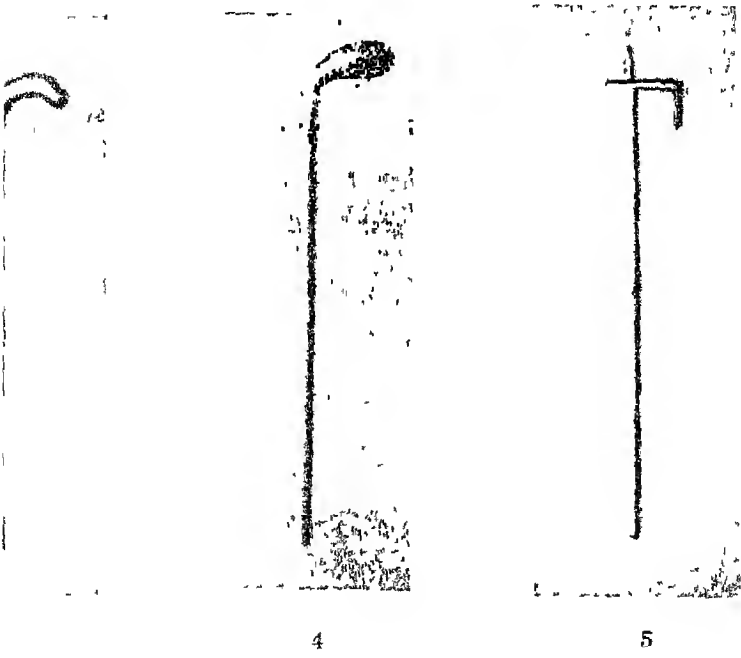
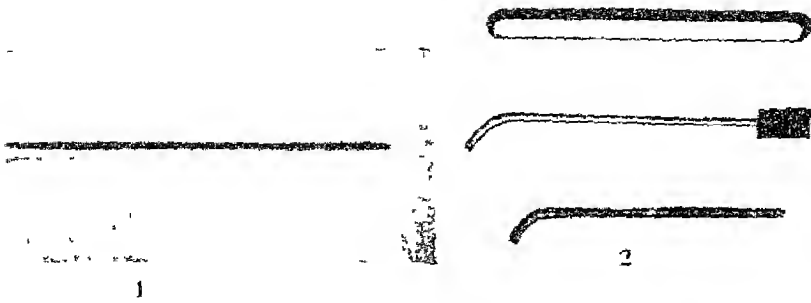


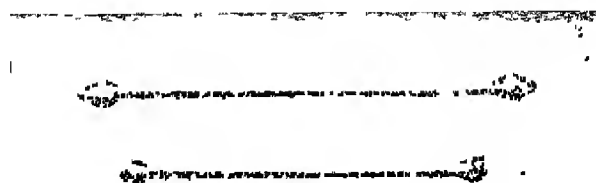
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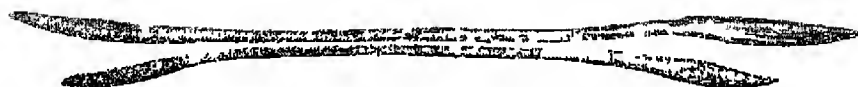
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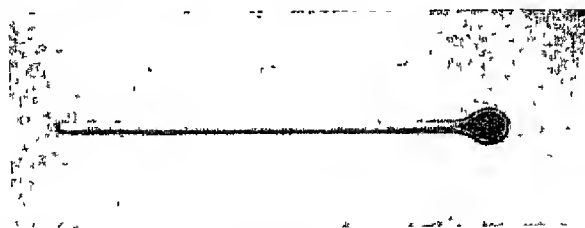
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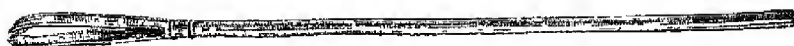
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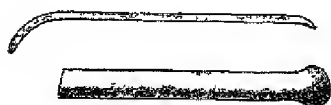
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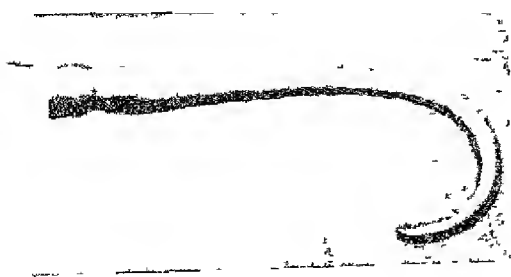
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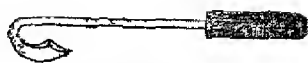
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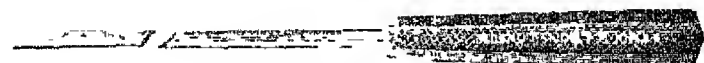
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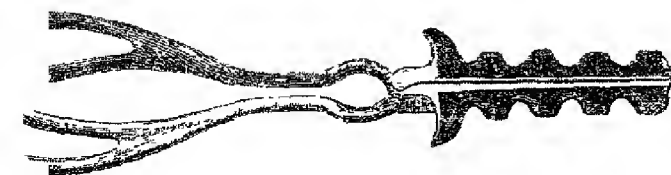
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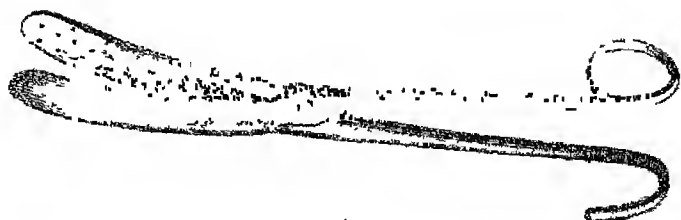
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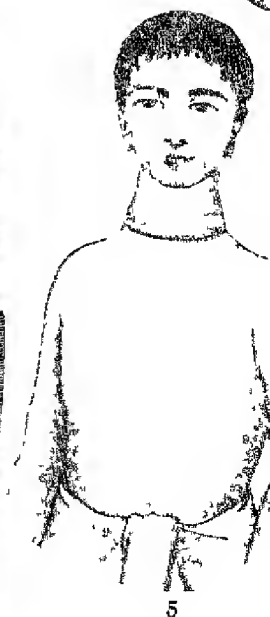
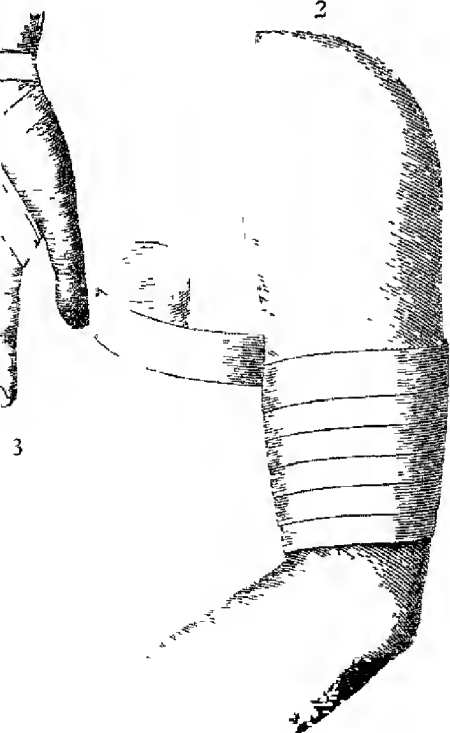
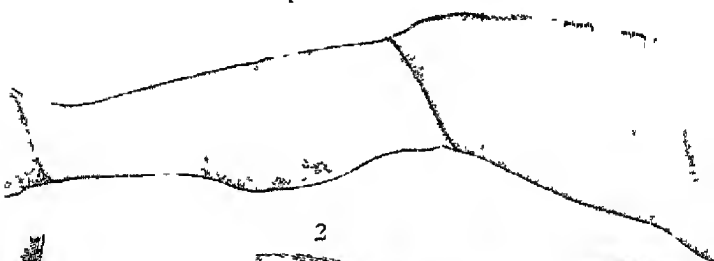
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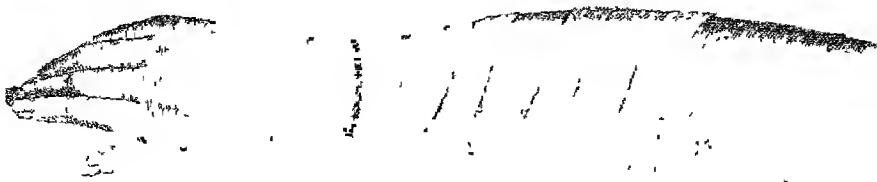
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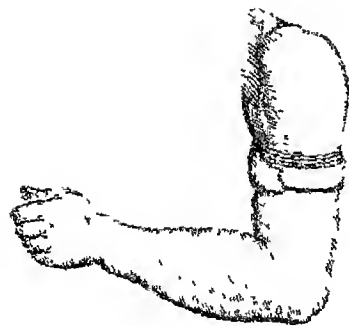
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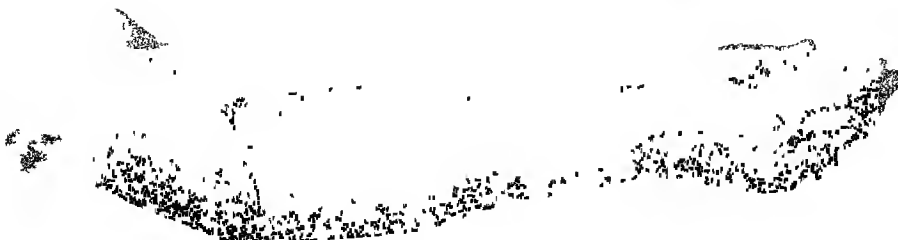
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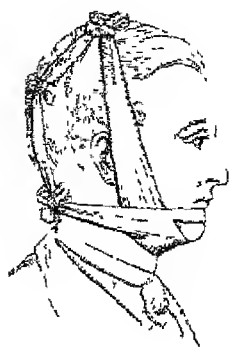
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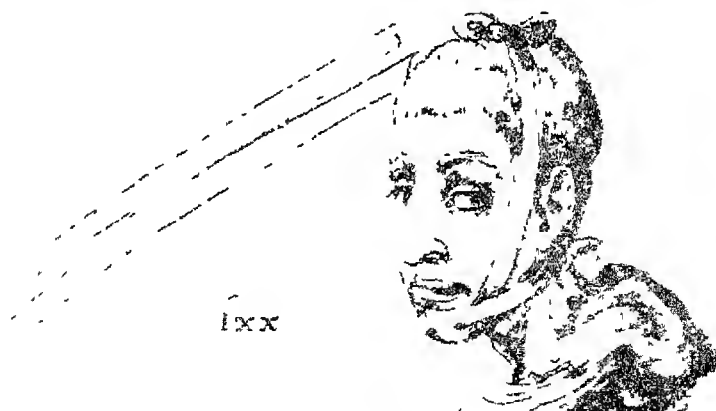


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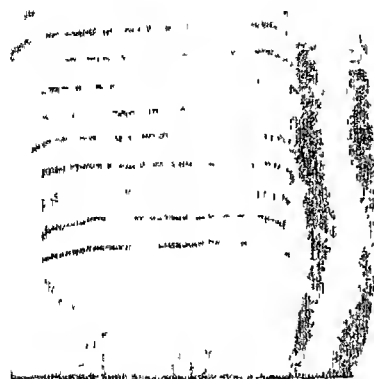
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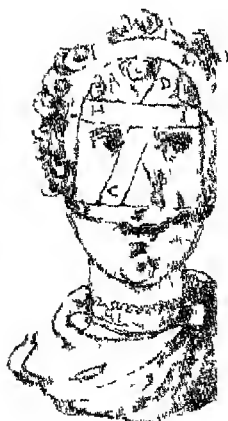
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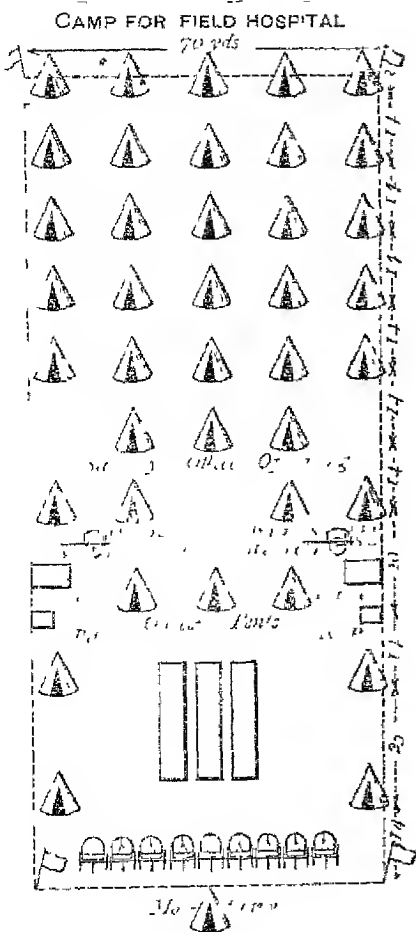


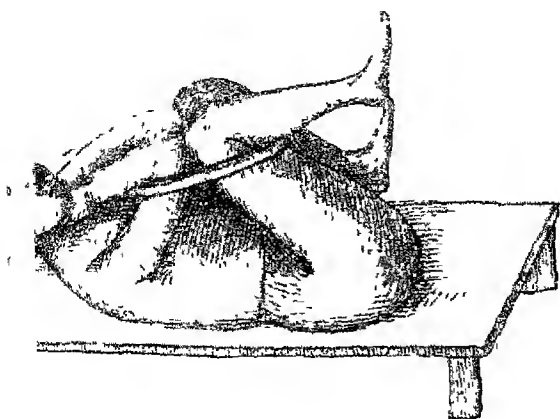
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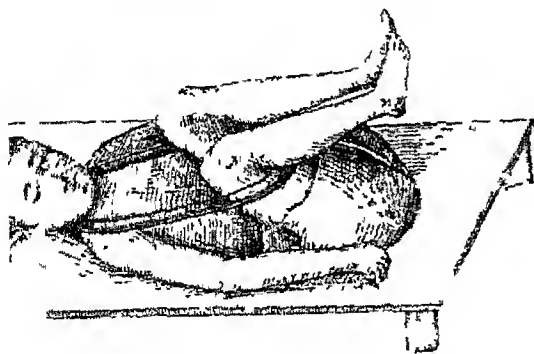
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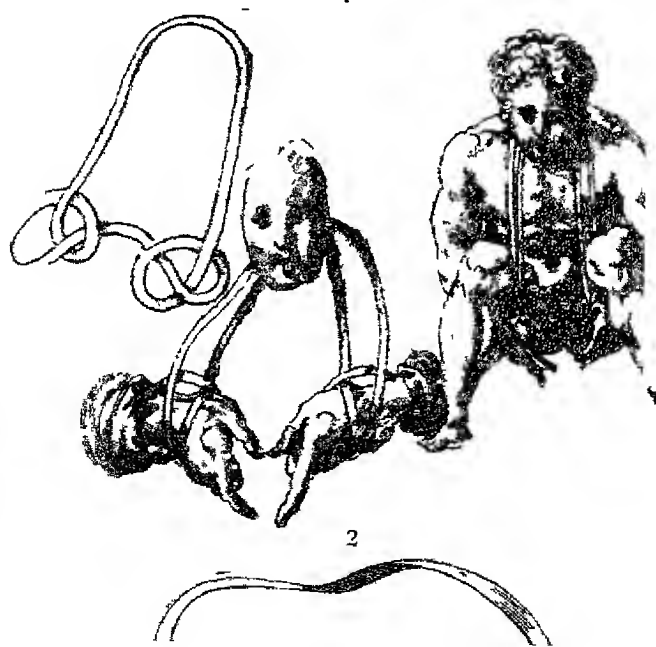
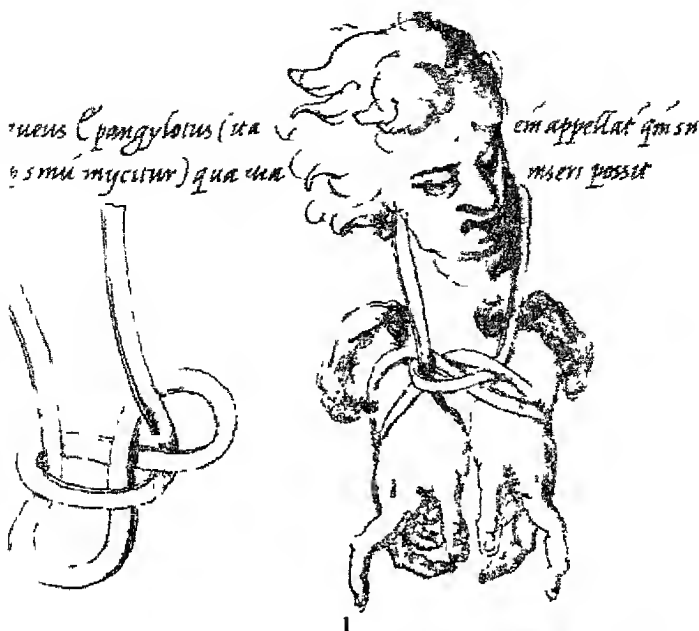
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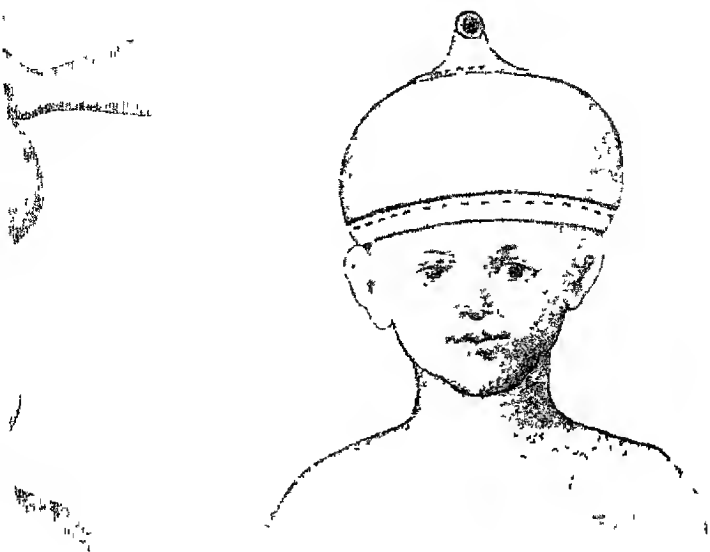


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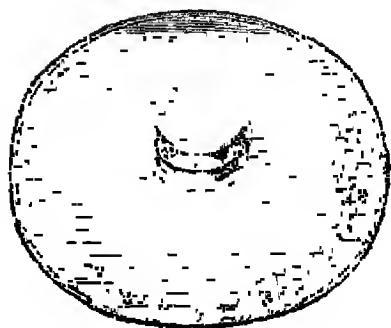
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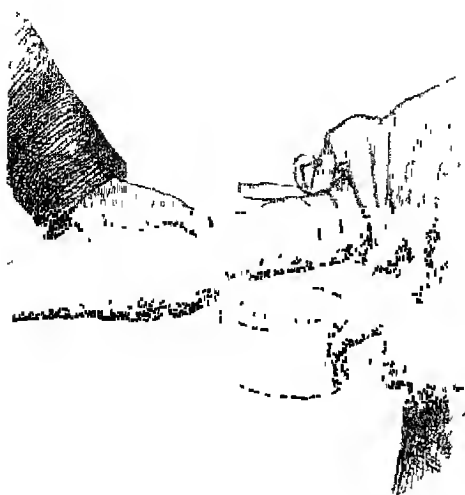
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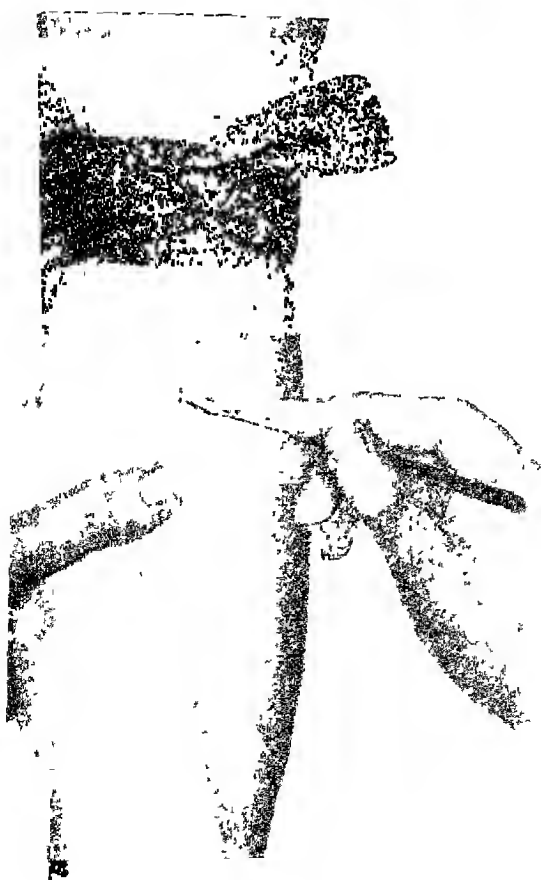
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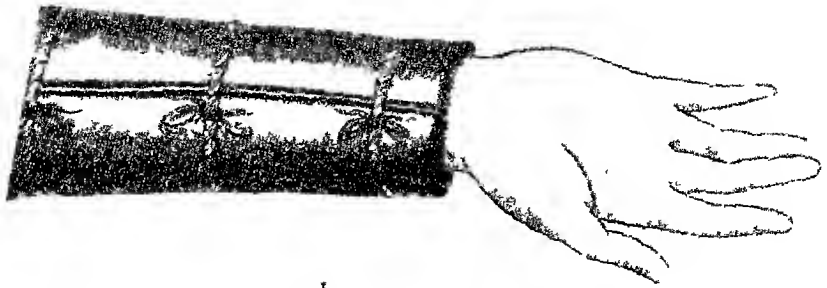
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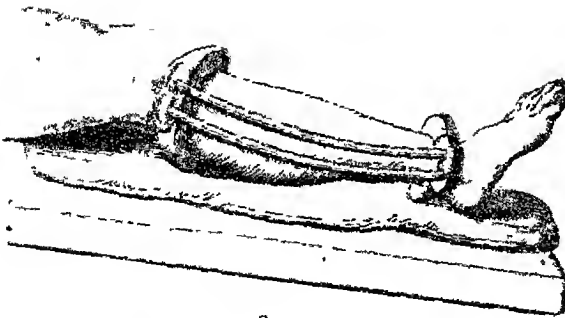
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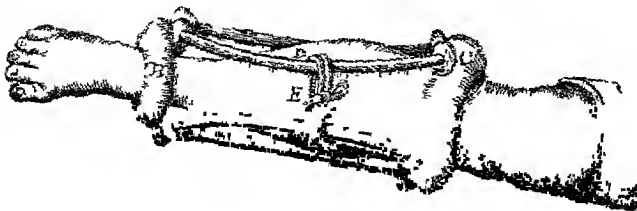
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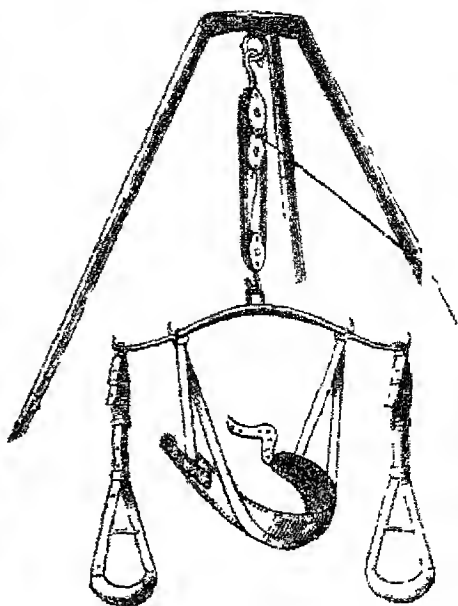
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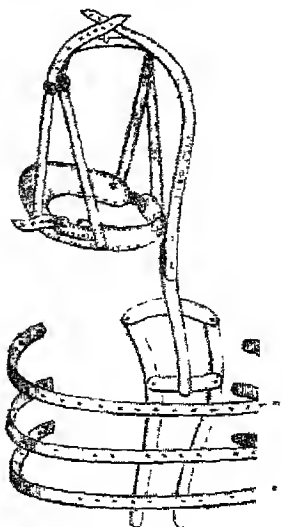
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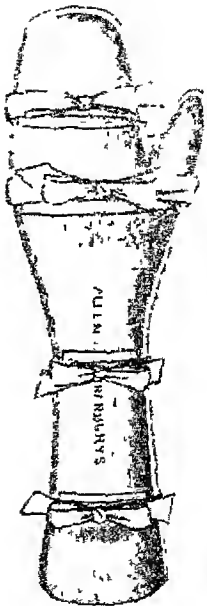
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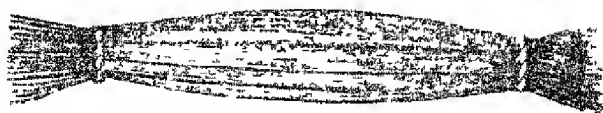
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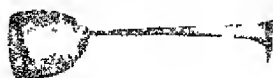
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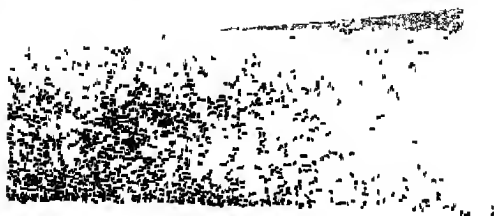
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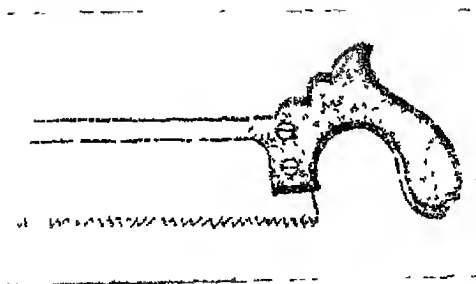
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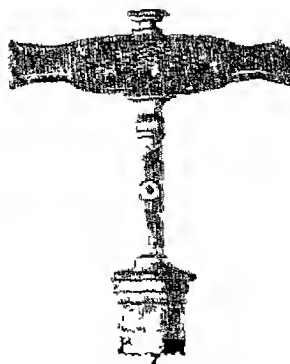


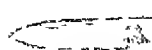
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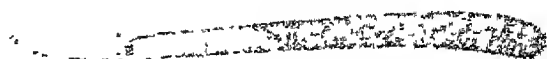
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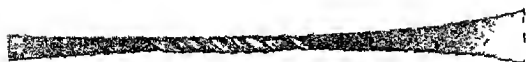
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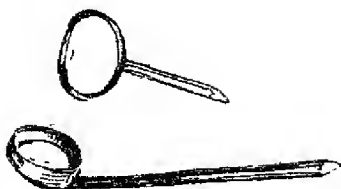
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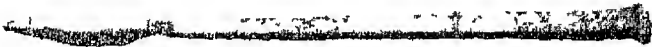
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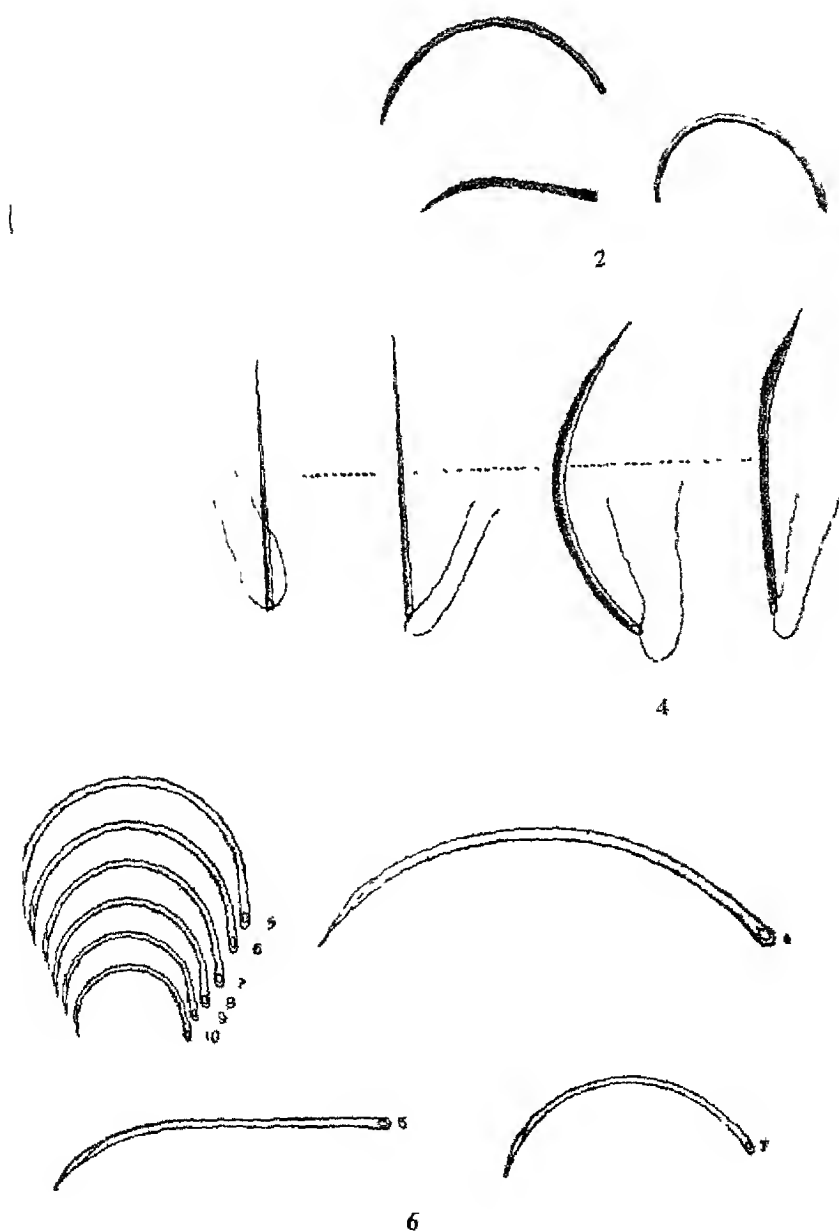


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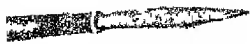
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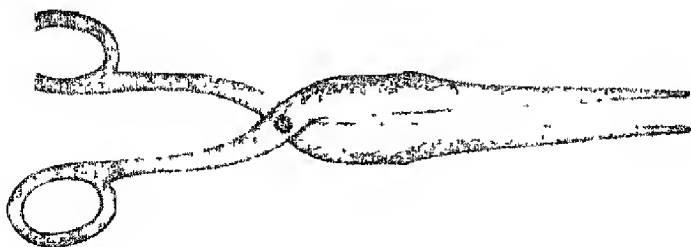
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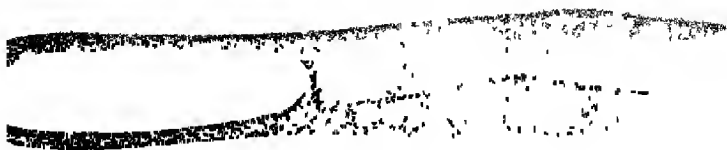
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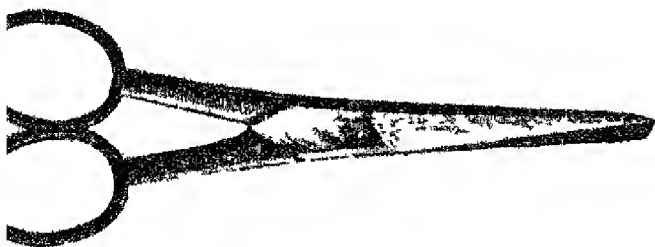
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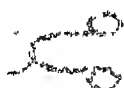
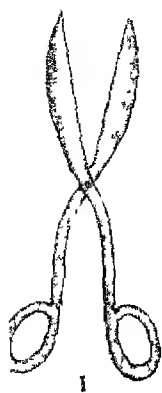
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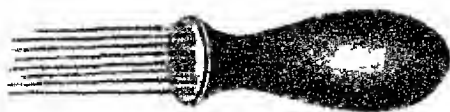
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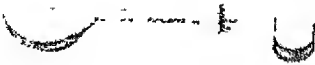
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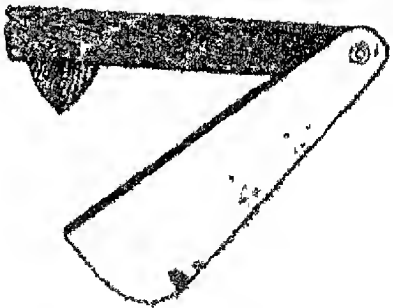
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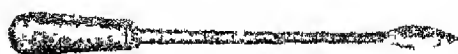
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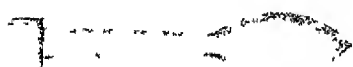
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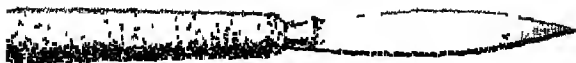
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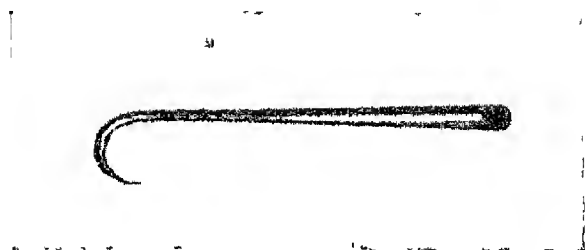
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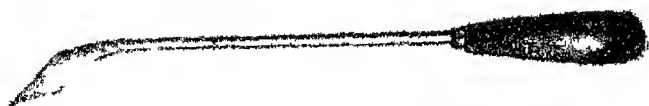
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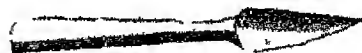
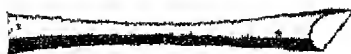
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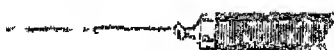
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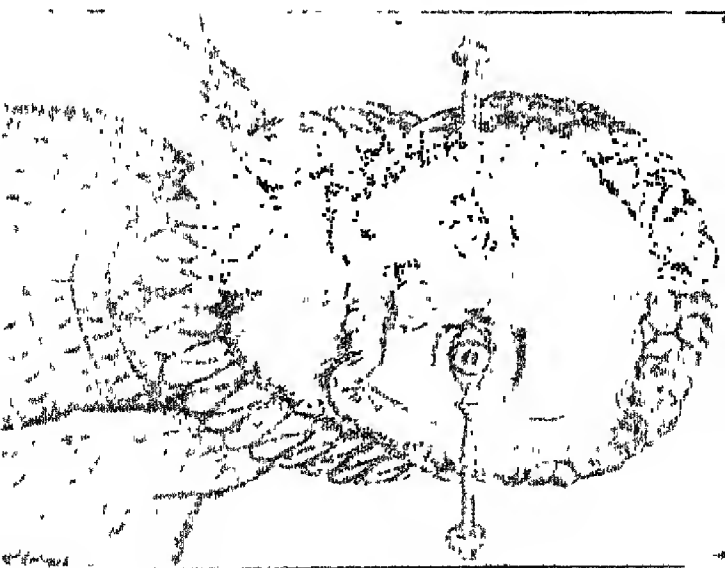
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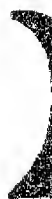


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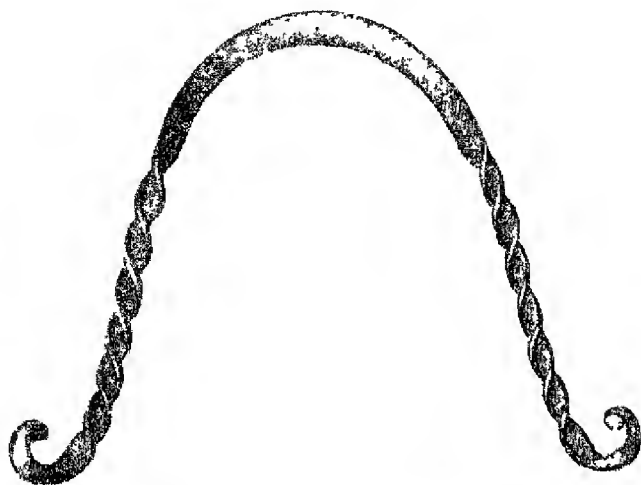
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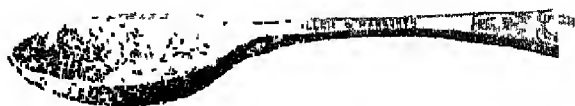
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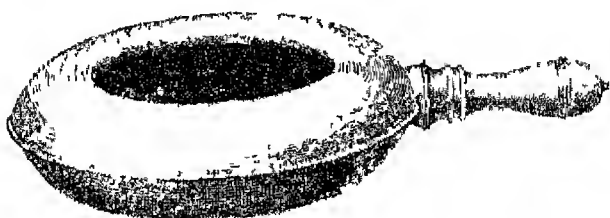
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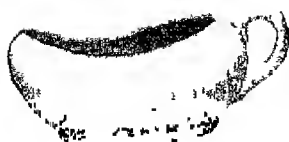
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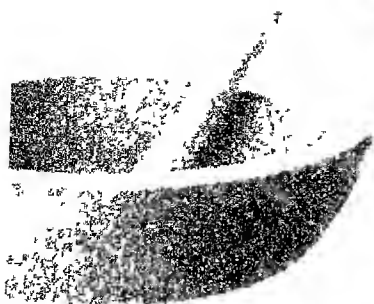
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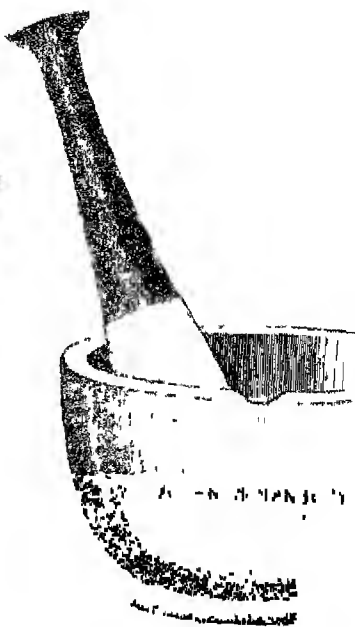
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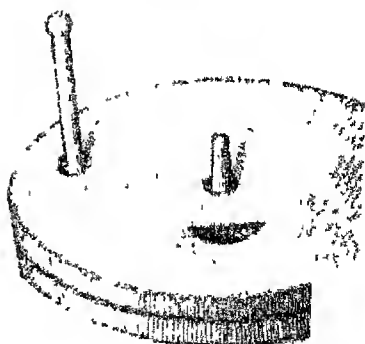
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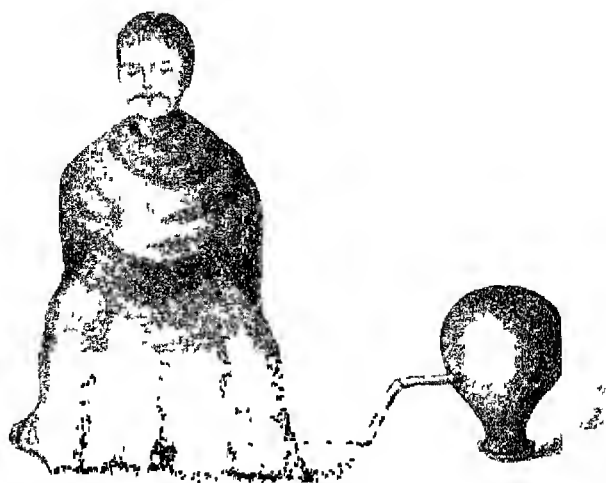
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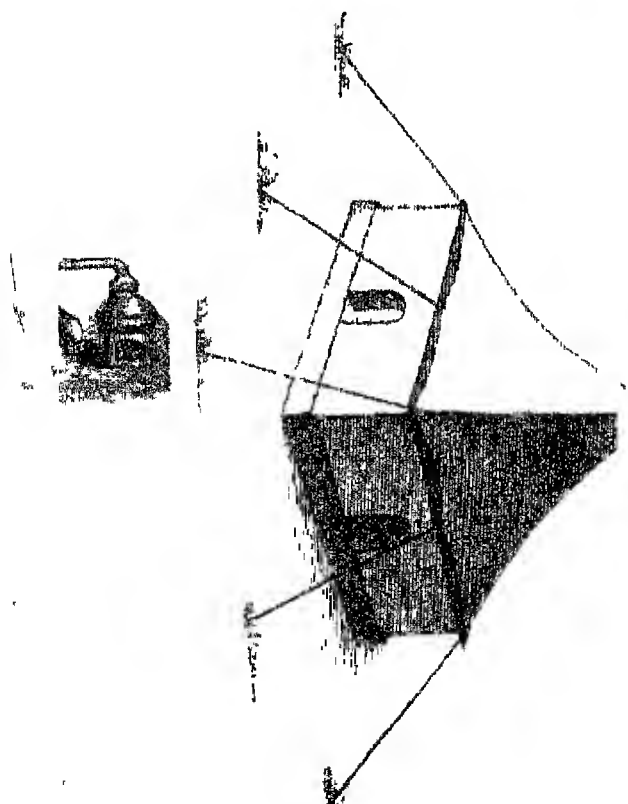
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